The Shilluk, owing to their geographical conditions, are more sedentary than the other Nilotic tribes, and there is no great transhumance as among the others. They also are more intent on cultivation, Dura (sorghum vulgare) being the chief crop. They use a shifting cultivation technique; a certain plot of land is cultivated from four to six years and then left for ten to twelve years. An agricultural authority (5) on the Soudan said that "cotton as a cash crop began in 1923. But the Shilluk as well as the other Nilotes, are poor cultivators. The biggest crop of cotton in a twenty year period was 760 tons of raw cotton, mainly from the Shilluk land. It was abandoned and Sesame began to take on importance because the country consumes a fairly large amount of sesame oil."

According to the latest census available there are about 80, 000 Shilluk.(6)

Anthropometrics

During my stay in the Shilluk land I have taken anthropometric measurements on forty persons - 34 men, 11 of whom are members of the Shilluk royal family, and 6 women, one of whom is also royal. The persons were all measured at Malakal Town, but they were from different parts of the Shillukland, covering the whole area from north to south. Naturally I have a greater percentage of people representing the central area, i.e. around Malakal, and the percentage decreases northwardly and southwardly. Here is a list of the villages and settlements to which my subjects belong:

Akurua, Nun, Fabin (Detwok district), Achop, Alel, Achag (north of Kodok), Kodok, Golbany, Lul, Nyingar, (near Lul) Padit (near eastern Lau), Melo, Bouky (n.w. Malakal), Ogod-Batu (eastern bank), Pamath, Thrujok, Kango, Fokan, Nyin-yar, Burr, Tonga, Atar und Nyijok. [103]

I have taken the following measurements following the points described and defined in "Notes and Queries in Anthropology." (7)
Head length and breadth , nose length and breadth, facial and upper facial heigths, stature and sitting heigth. On 8 of the men measured I recorded also the minimal frontal breadth and the bizygomatic breadth.

The tools I used were the sliding and spreading calibres, and the Anthropometer.

The results of my measurements are nearly identical with those of Professor Seligman (8) in both cephalic and facial indices and stature, but there is a considerable difference in the nasal index which I am not able to explain.

		C.I.	N.I.	F.I.	S.(cm)
"A"	Seligman (21)	71.3	93.9	83.2	177
	Riad (34)	71.6	85.5	84.5	177.2

From the distribution of the physical characters in different parts of the Shillukland - 12 of the men measured by us are from Gerr (northern Shilluk province), and 22 men are from Lunk (southern Shilluk province) - we got a very astonishing result; it revealed that the Shilluk are not a homogeneous people as far as cephalic index and stature are concerned.

		C.I.	N.I.	S. (cm)
141	"B" Gerr Prov. (12)	72.2	84.7	178,6
565	Luak " (22)	71.1	86.4	176.8

This is further and clearly illustrated from the measurements taken only on the Colo (any common Shilluk other than the members of the royal family and the Ororo members):

"C"	Gerr Prov. (6)	73.3	85.5	178.5
	Luak " (17)	71.7	85.0	174.5

Here the differences are shown more clearly than those in table "B" in which royal members were included. This means, that the royal members have had, so to say, a compromising effect on the indices and further it means that the royal members have different anthropometric qualities. This is shown in table "D".

	C.I.	N.I.	S.(cm)
Royals (11)	70.8	85.9	178.9
Colo (23)	72.5	85.2	176.5

Also there is a tendency among the royal family members to differenciate physically, in north and south. This may be seen clearly in table "E":

Gerr (6)	71.1	83.9	178.7
Luak (5)	70.5	87.9	179.2

The mean indices for the 6 women were:

"F"			
Colo(5)	72.1	86.1	162.9
Royal (1)	70.22	35.1	165.7

Here we also see the difference between commoners and nobles, though the number of samples is not sufficient to stand by itself. To depend here on the results of the 34 men measured to state that difference of physical character occurs also among Shilluk women.

Now here are some notes on the forgoing tables, to sum up, for the time being, a hurried conclusion liable to alteration if new anthropometric studies on the Shilluk and related tribes are undertaken in the future.

114 141 1. The difference in the Nasal index in table "A" may be attributed to differnces in the points of measurement between Professor Seligman and me, unless Seligman has taken his samples from a certain area in the Shilluk-land. If this happens to be the case, it is most probable that the majority of his samples were taken from southern Shillukland in general, and the districts of Tonga and Fenyikang specifically, because my samples in this area show the highest nasal indices recorded as shown in table "C" below.

141 2. The considerable differences between north and south, shown in tables "B" and "C", are a matter of the first degree of importance. This is the first time, as far as I know, that this difference has been brought to light. And its importance is not a self-contained racial matter, but is accentuated by Shilluk mythology in which North and South stand opposed to each other as two political units and in certain times as two religious units.

The racial difference may be fully understood and explained by Shilluk mythology. Nyikang, the demigod and the Shilluk culture hero, came, with his followers, to the southern part of present Shillukland and erected his headquarters at Nyilual, in Panyang district. When he proceeded northward to extend his boundary and to found his kingdom, he found the lands on either side of the Nile already inhabited. The aboriginal people are said to have been Nuba and Fung, or according to one authority (9) Dongolawys or Berabra. It seems to me that the Fungs were not really the inhabitants of the land, but more reasonably they were subduing the country, especially the part of it which lies on the right bank of the Nile. At any rate, Nykang conquered the present Shillukland in a peaceful way sometimes, and by means of force in in those instances where people showed resistance. The people either fled to the Nuba mountains and Sennar, or stayed in the land. Those who stayed were not reduced to slaves, but were accepted as Shilluk citizens and thus incorporated into the Shilluk nation.

Now the high cephalic index in the north may be attributed to a Nuba influence, more specifically to an eastern Nuba influence, or to a mesaticephalic influence from the Dar Fung Hills.

There is no other nearby area of mesaticephals than the eastern Nuba Hills. The next nearest area of mesaticephals is the Dar Fung mountains which lie within a range of between 200 to 400 kilometers northeast of the Shilluk land across the Nile. Here first are some anthropometric measurements from both mesaticephalic areas:

	C.I.	N.I.	F.I.	U.P.I.	S.(cm)
Nuba Hills: (10)					
Tegale (7)	79	103	76.5	44.5	
Ilyry & Lafofa(32)	76.42	92.26	82.26	46.19	173.82
Lemon (8)	78.88	95.63			
Tira-ol Akhdar, Mandi, Kandrema					
Khoma (7)	77.75	92.37	82.42	45.55	169.8
Nuba women (11)	76.30	94.03	83.48	48.23	157.2
Ilyry (10)	75.15	94.4			
Dar Fung Hills: (11)					
Fung (5)	74.6	83.3	84.9	46.5	170
Ingassana (12)	73.1	90.4	82.8	44.3	173
Khoma (7)	73.4	96.3	82.0	45.9	
Uduk (9)	77.4	97.0	77.9	43.7	167
Baran (30)	75.2	101.5	83.1	44.4	170
Jum Jum (17)	75.5				
Koban (43)	79.1	96.0	84.0	47.0	176

Hypothetically we can say that these two areas in the past formed a mesaticephalic belt, now separated through the migration of the dolicephalic Dinka of the White Nile, on the eastern bank, and the Shilluk and Baggara Arabs on the western bank of the Nile.

Both areas, within themselves, do not form racial unities, but are more or less refuge areas. Thus they are merely conglomerations of different physical and cultural types which have fled from the plains in front of any conquest. But the most important feature that combines them (not politically, but from our scientific standpoint) is their mesaticephalic character.

144 174 How it is impossible to suggest that all people fled to the hills because of an instance of superior invasion; some will naturally stay in their land and will incorporate with the new-comers. At first they may well form a caste , they may also be reduced to slavery, but through the factor of time intermarriage will occur, and the conquerors and conquered will fuse into a harmonious unit. This process depends upon the policy followed by the conquerors; it will be allowed to develop if the conquerors accept the aborigines in the frame of their society. The negative picture will result if the invaders insist upon wholly exterminating the aboriginals. Many factors define the policy of the invaders, but the most important is the numerical factor. If it is a big migrational wave, then there is no question of peaceful incorporation and amalgamation, and if they form a minor wandering wave, they will be keen on the amalgamation policy . The latter case was that which we can deduce from the Shilluk legend. They were so keen upon populating the country that they tell us that Nyikang, through his supernatural powers and the help of Dak, his son, caught mysterious people from the river, and changed animals into men to make them their subjects and to incorporate them into their nation.

If this was the case, then we should be able to say that the present Shillukland, before the coming of the Shilluk of Nyikang, was populated by at least a mesaticephalic group in the north and a dolicephalic group in the south, culturally and perhaps politically separated. The longheaded group may be the racial substratum of the whole area of the Kilotes of the Sudan.

141 174 3. The further heterogeneity of the Shilluk, which table "D" reveals, is quite understandable. The Shilluk legends and myths tell us that the founder of the nation and his followers came from a far country near "Nam Doun" which means a broad and big river, a lake, a salt sea or a lake shore.

The physical qualities of the royal family members, as shown in table "D", do not give any clue to the real origin of this migration, because these qualities are shared by most of the inhabitants of the bigger area around the Shillukland. Long-headedness is nearly universal in Africa. The tendency to broadness is rare and may be attributed to Armenian (Alpine) influence in the northern half of the continent and to Pigmy influence in the central parts. From other evidences such as their legends and the legends of other Shilluk-speaking tribes, as well as other circumstancial evidences we can speculate on the original home of the Shilluk. Many theories have been introduced to account for the origin of the Shilluk, but here is not the right place to discuss this controversial problem.

4. In table "E" we see further disharmony. The tendency to a higher cephalic index is readily explained if we understand the Shilluk social institutions. The kings marry commoners according to the law of exogamy which is prevalent among the Shilluk. Later on, when the wives of the king are pregnant, they are sent to their villages to give birth. The royal babies are never born in Fashoda , and they stay in the village of their birth under the protection and guidance of the village chief.

We can conclude that the racial heterogeneity of the Shilluk is not simple. Three factors play a role in the ethnic composition of this nation and like many other nations, these different elements are fused into a social and cultural unit.

141 ●
304

Card No	C.I.	N.I.	F.I.	U.F.I.	S.(cm)	incisors	marks 1	2	3	4	dots	C.I. cm.	mm.	N.I. cm.	mm.	S. cm.	mm.
D 6	72.6	85.4	78.3	43.3	176.9												
C 5	77.7	84.3			183.4	+					25		777				+
B 2	70.1	89.1			182.4		+				25				+		
D10	69.8	82.6	88.8	53.1	178.4							+		+			
C 9	74.4	83.7			168.9	+	+	+	+							+	
D 4	75.3	88.0	89.7	47.4	181.4						25						
	73.3	85.5			178.5												
D 8	67.7	97.7	85.3	44.9	172.3	+					23	+					
B 8	71.6	102.2			170.0	+					22					+	
B10	71.5	100.0			169.1	+					20						
B 9	69.9	97.7			178.8	+		+	+		19						
C 4	71.9	88.2			170.2	+		+	+	+	26						
C 3	73.1	88.6			164.3	+					23			+		+	
B 6	72.1	82.0			168.3	+					24						
B 5	70.1	76.2			179.4	+					25						
B 4	71.4	71.9			179.1						30						
A10	72.5	83.7			170.4		+	+	+	+							
A 9	70.6	75.0			189.4	+											+
A 8	72.5	82.3			183.1												
A 7	75.4	80.3			167.6		+	+	+	+				+			
A 6	73.1	78.4			183.3												
A 5	71.5	85.4			174.3			+	+								
A 4	71.6	83.9			182.3			+	+								
A 3	71.8	92.0			169.0	+	+										
	71.7	85.0			174.5												
C10	74.3	86.9			158.3	+	+				31	+				+	
D 2	73.5	84.0			159.7	+	+			+	26						
D 1	70.0	92.8			169.0	+	+	+	+	+	28	+			+		+
C 2	71.5	82.6			164.9		+		+		30			+			
C 1	71.3	84.4			163.0	+	+	+	+	+	25						
	71.7	85.0			163.9												
B 3	71.6	83.3			165.0									+	+		
A 2	70.1	76.9			174.2						23			+			
A 1	72.1	91.4	86.0	43.3	184.1												
C 7	68.8	91.8			187.4						30						
D 5	68.1	82.0	77.5	42.0	185.5						23						
C 6	77.0	78.0			176.2	+	+				34			+			
	71.1	83.9			178.7												

141
304

Card No	C.I.	N.I.	F.I.	U.F.I.	S.(cm)	incisors	marks L	R	B	A	dots	C.I. mn.	C.I. mx.	N.I. mn.	N.I. mx.	S mn.	S mx.
B 7	73.6	88.0			180.8		+		+		26						
C 8	73.4	96.2			175.1			+	+					+	+		
D 7	67.0	88.7	89.7	49.6	174.6	+		+			28	+					
B 1	71.3	87.7			184.8		+				21						
D 9	67.4	79.2	93.0	50.4	181.1		+				31						
	[illegible]	87.9			179.2												
D 9	70.2	85.1			165.7	+	+										

The sign + means that the people practice knocking out lower incisors, or body marks.

L = Left upper arm and shoulder R= right upper arm and shoulder B= Back A= Abdomen

mn= minimum mx= maximum

Tribal Marks .

304 619 [114] The most important tribal mark among the Shilluk is one row of dots or scars on the forhead called TAI which extends from near the ear to the other ear, crossing the temples. The old generations have three rows of these dots.(12) Butt writes that "Shilluk men and women have three to five rows of dots or scars....(13) but I was unable to discover any Shilluk man or woman who had these five rows of TAI. Butt may have confused this scarification with that of the Nuer and the Dinka who make five to seven deep cuts on the forehead. A profile of a Shilluk man or woman will betray a strong resemblance to someone who has a necklace of black or horn beads stretched across his forehead. These dots are of no fixed number.(14) They vary according to the breadth of the face and the forehead. No Shilluk is exempted from this mark, but in my study I found one old fellow from the royal family (15) who happened to be born in Metema, north of Khartoum , as his mother was taken captive during the Mahdi - Shilluk war. He lived about twenty years in the north, then he came home, even having lost his Shilluk tongue. He had no TAI.

114 184 304 619 304 197 [753] The most important tribal mark is the knocking out of the lower incissors. Seligmann wrote (16) that the royal offshoots till the fourth generation "... follow the royal practice of retaining their lower central incisors instead of having them knocked out as commoners do..." Butt also says: " Among the Shilluk the royal family alone keep their teeth intact." (17) From the results I have obtained and illustrated in table "C" we can make two observations:

a) that not a l l commoners practice the knocking out of their incisors,

b) that some royal members practice it.

The Shilluk told me that this practice was universal among the commoners in the past, but nowit is practiced at will. The old belief was that the failure to knock out teeth caused sickness. It must have been contact with the Arabs that changed this belief, and with this contact the habit is going to die out.

121 To begin with, we just need a quick resumé of the historical background, engulfed, as is always the case, in mythological terms, of both components of our subject. Who are the Shilluk, and who were the Funj?

B) The SHILLUK :

131 The Shilluk now are a negroid tribe that occupies mainly the west bank of the White Nile from about Kaka to Tonga - a distance of about 350 km, and extends inland from the river to about 30 to 50 km. They also occupy the lower reaches of the Sobat river and a pocket around the town of Malakal on the eastern banks of the White Nile.

141 The physical characters of the Shilluk are surely negroid but they are not Negros. Anthropometric results indicate 144 that they are a tall ethnic group, dolichocephalic and platyrrhine. 8) But within the tribe anthropometrical data also reveals two distinct racial components; the royal family and the common Shilluk, the former being taller and more dolichocephalic. 9) Further, heterogeneity was also detected between the northern part of the Shillukland and the Southern part, with higher stature and higher cephalic index figures in the north. 10)

144 This compound heterogeneity has its backing in the Shilluk tradition. The national hero, semi-God, and first king 173 of the Shilluk, Nyikang, led his family on a long march which was divided into two periods of wandering, and gathering adherents and followers from everywhere, and without discrimination, arrived in the present Shilluk land. The stock of wanderers was definitely alien to the peoples who were inhabiting the land, and whom we may call aboriginals of the Shilluk land. Nyakang incorporated part of these aboriginals in his new kingdom; the other part probably fled from the country to the nearest area that provided refuge, and this must have been the eastern Nuba Mountains, to the west of the present Shilluk country. It is naturally expected that after such an event -the coming of a new stock, wielding power in their hands- a caste system would be introduced to the country; the newcomers are now the elite of the country. Titles of nobility are held to the fourth generation. 11) Descendants after the fourth generation are also respected.

144 The racial difference between north and south within the 635 Shilluk country is backed by the fact that the country is politically divided in two provinces, opposed to each other to the degree

8) Seligman, p.13, and p. 38. Also Riad, pp. 71-76

9) Riad, pp. 71-76

10) Riad, pp. 71-76

11) Seligman, p. 49.